

# **Inside Wallops**

Wallops Flight Facility, Wallops Island, Virginia

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## Wallops Launching Balloons and Rockets to Support Space Shuttle Payload

A flurry of launch activity continues at Wallops as personnel launch a total of 67 balloons and rockets taking atmospheric measurements in support of the STS-85 Space Shuttle Mission.

Beginning August 4 and concluding August 22, Wallops' personnel will launch 33 each meteorological balloons and rockets and one sounding rocket in support of the primary payload on mission STS-85, the Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere-Shuttle Pallet Satellite-2 (CRISTA-SPAS-2).

Space Shuttle Discovery and a 6-person crew began a 10-day mission with a launch from the Kennedy Space Center on August 7 at 10:41 a.m. EDT.

These daytime rocket and balloon launches will be conducted to coincide with orbital passes of Discovery over the Wallops area. The majority of the launches will occur twice daily during a critical data gathering period from August 8 through 15.

Wallops scientist Frank Schmidlin, a co-investigator of the meteorological rocket and balloon missions, said the temperature, ozone, pressure and wind data gathered by these systems are very important to calibrate the atmospheric measuring systems on Shuttle Pallet Satellite (SPAS).

The German-built SPAS was deployed from Discovery's payload bay once the Shuttle was in orbit and will spend more than 200 hours in free-flight. The CRISTA-SPAS system will use t3 telescopes and 4 spectrometers to gather data to help investigators from 15 countries understand how small-scale tracer "filaments" in the stratosphere contribute to the transport of ozone and chemical compounds that affect the distribution of ozone.

A two-stage NASA Terrier-Orion sounding rocket carrying a payload for the Utah State University Research Foundation Stewart Radiance Laboratory, Bedford, MA, was launched at 9:24 a.m. EDT August 8 from Wallops. A NASA Black Brant V

sounding rocket carrying a Langley Research Center payload also was launched August 8 at 12:29 p.m. EDT by the Navy from the White Sands Missile Range, NM. Both are plasma physics payloads.

In addition to the Wallops site, complementary and correlative measurements will be taken world-wide by ground-based instruments, balloons, rockets and aircraft. This world-wide ground-based campaign is being directed from Wallops by Schmidlin and Gerald Lehmacher of the University of Wuppertal, Germany.

#### NASA Selects ISO 9001 Registrar

NASA has selected a third-party registrar, Det Norske Veritas Certification, Inc., Houston, to provide detailed compliance audits of NASA centers including Goddard.

ISO 9001 is an international standard for quality management systems that has been accepted by more than 100 countries around the world. NASA is the first Federal agency to commit to ISO 9001 certification.

The primary thrust of the standard is to promote national and international competitiveness for suppliers through application of validated quality management systems. Certification to ISO 9001 by a third-party registrar validates that the new practices are in place and working.

### Remote Control Robot Paves Path for Future Missions

A hardy traveler named "Nomad" recently set a record by traveling farther than any remotely controlled robot has before over rough territory. The robot's four wheels logged more than 133 miles across Chile's rugged

demonstrations and scientific activities. Nomad often worked on its own to avoid obstacles and, in a clear foreshadowing of the future duties of similar robots, it recognized meteorites planted in the desert as a

test and may even have found a fossil.

Nomad is about the size of a small car. To m a n e u v e r through rough terrain, the robot has four-wheel drive and four-wheel steering with a chassis that expands to improve stability and travel over various terrain

conditions. Four aluminum wheels with cleats provide traction in soft sand.

For this terrestrial experiment, powered was supplied by a gasoline generator that enable the robot to travel at speeds up to about one mile per hour.



Atacama Desert from June 15 to July 31, during a field experiment designed to prepare for future missions to Antarctica, the Moon and Mars.

Scientists from Ames Research Center and Carnegie Mellon University's Robotics Institute performed experiments with Nomad for 45 days, conducting both technology Wallops News Shorts

.....The deadline for the Wallops Mission 2000 logo contest is Friday, August 15. Entrees can be submitted to the Public Affairs Office, Bldg. F-6, Rm. 108. First round of voting by employees is scheduled for August 20.

.....A scientific balloon was successfully launched August 2 carrying a payload for the Jet Propulsion Laboratory. The experiment, carried aloft by a 3.46 million cubic foot balloon, is the flight and measurement of solar cells to be used as calibration standards for setting the intensity of solar simulators. The payload for the reimbursable flight was recovered.

#### Wonderful Summer!

by Jim Buchanan, Meteorologist

July was a really nice weather month. While a little more rain for the gardens and lawns would



have been nice, the abundance of sunshine was just what tourists and outdoor enthusiasts were looking for. When heat and humidity levels approached unbearable levels, a cool front would cross the area bringing comfortable conditions. Even the effects from Tropical Storm Danny were minimal.

Temperatures during July were much closer to normal than they were during July 1996. The average daily high was 85.2 degrees Fahrenheit, normal is 84.8 degrees. The average daily low was 68.4 degrees Fahrenheit, which is normal. The average daily temperature of 76.8 degrees was .2 degrees warmer than normal. A new record high of 96 degrees was set on July 18 breaking the old record of 95 degrees set in 1986.

Even with 2.24 inches of rain left by Tropical Storm Danny, only 3.36 inches of rain were recorded for the month. Reminiscent of the effects of Hurricane Bertha, July 1996, without Tropical Storm Danny rainfall totals would have been almost 2.5 inches less than normal. The maximum rainfall amount in a 24-hour period was 1.46 inches on July 24. Including the tropical storm there were 10 days of measurable rainfall during the month

While early September is still at the peak of the hurricane season, September also marks the beginning of the end of the tropical storm/hurricane season. As frontal activity increases, atmospheric changes gradually make it harder for tropical activity to develop. Be aware, because storms do still develop and can affect the Eastern Shore during September. Keep emergency supplies handy and practice drills for hurricane safety.

As summer winds down, remember that school starts soon. We will need to be even more on the watch for kids and school buses.

Stay safe for the rest of the summer and enjoy the upcoming Labor Day weekend!

Sympathy is extended to the family and friends of **Norris Riley** 

who died July 14, 1997.
Riley retired in 1990
as a motor vehicle operator in
Plant Operatins and Maintenance
Division.

#### Reiki Sessions Offered

Jennifer Burkett, Reiki practitioner will be available for sessions at Wallops from 10 a.m. to 2 p.m. on August 19. Burkett demonstrated Reiki in the gym during the Focus on Our Future Day activities.

The fees for the sessions are as follows: 15 minutes - \$10

30 minutes - \$10

30 minutes - \$20

45 minutes - \$30

60 minutes - \$40

Appointments can be made by calling Beverly Hall, x1714. Prepayment is required. If the appointment cannot be kept it can be passed on to someone else. Leave arrangements must be make with supervisors for appointments made outside the normal lunch break.

Information on Reiki is available on the web at:

http://www.yahoo.oom/Health/ Alternative\_Medicine/Reiki

#### **Body Facts**

- Your heart is the strongest muscle in your body it beats about 100,000 times each day in an average adult.
- The thinnest skin on your body is over your eyelids.
- Your brain receives 100 million nerve messages each second from your senses.

#### Crab Steam

The Morale Activities Committee is sponsoring a crab steam on Friday, August 22 at 6 p.m. in Building F-3 — menu will consist of steamed crabs, corn on the cob and hush puppies. We'd like to get an idea of how many folks are interested in attending so that we can estimate how many crabs we should buy.

Call Mike Martone on x2360 or, better yet, e-mail Mike at: **Michael. Martone.1@gsfc.nasa.gov.** and let him know if you want to attend and how many people will be coming with you.

Appreciate an early response so that we can get started on the preparations!!

#### Women's Equality Day

The NASA and ACSC Federal Women's Program Committee invite you to join in celebrating Women's Equality Day with a luncheon --

Featuring - Carol Bosserman League of Women Voters Maryland Chapter

#### "Today's Active Voter"

11:30 a.m. August 25 Williamsburg Room Bldg. E-2

The menu consists of filet, baked potato, salad, vegetables and dessert.

The deadline for reservations is August 15. Call Linda Thompson, x1072 or Sandy Bowden, x1060.

#### Inside Wallops On-line

The latest edition of *Inside Wallops* is now available on the Wallops homepage. A table of contents lists previous editions which may be viewed. The homepage address is: http://www.wff.nasa.gov



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Editor Keith Koehler
Assistant Editor Betty Flowers
Photography Optical Section
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